

**ABSTRACT OF THE DISCLOSURE**

A vortex grit trap comprising a generally vertically extending tank of  
5 circular cross-section including a separation zone having an inlet and an outlet  
for liquid flow to and from the tank, and in which liquid is circulated about a  
longitudinal axis of the tank, and, a grit collection zone positioned beneath the  
separation zone in use, the trap being characterized by a generally circular tank  
divider centered on the vertical longitudinal axis of the tank and extending  
10 transverse thereto, the divider defining a notional boundary between the  
separation and collection zones of the tank and being of smaller diameter than  
the adjacent region of the tank so as to define with the adjacent tank wall an  
annulus through which grit passes from the separation zone to the collection  
zone in use, and, means for generating a cloud of gas bubbles migrating in use  
15 upwardly through substantially the whole of said annulus whereby substantially  
all grit passing from the separation zone into the collection zone passes through  
the upwardly moving bubble cloud in said annulus so that organic solids settling  
with the grit are displaced upwardly by the bubbles into the flow within the  
separation zone while the grit passes through the bubble cloud in the annulus  
20 and into the collection zone. There is also disclosed a method of separating grit  
from an aqueous sewage flow.